

Add air heat exchanger



AddAir is a versatile and highly efficient heat exchanger, combining the simplicity of traditional heating systems with the efficient humidity control of heat exchangers - but at a fraction of the initial cost, with much longer service life, and significantly lower running costs. AddAir quite simply is a game changer for the entire poultry industry, due to its supreme dehumidification capability.

Compared to other heat exchangers, AddAir has the following advantages:

- Better distribution of the air in the house
- Better litter condition
- Better integration with ventilation
- Significantly lower power consumption
- Significant saving in heating costs
- No cleaning and maintenance during production
- Open construction – easy to clean
- Much lower initial costs and running costs

System description

The AddAir unit is a water carried heat exchanger and connects to a conventional boiler.



When the dampers in the unit are closed, the unit serves as a traditional heater, recirculating room air over the heater and distributing it evenly throughout the building.

When dampers are open the unit serves as a heat exchanger and provides superior humidity control and ample supplies of preheated fresh air. The air entering the building is warm and will not cause draft or condensation. The air leaving the unit is extremely dry and will absorb moisture quickly and efficiently.

TECHNICAL SPECIFICATIONS

Heat capacity:	60kW at -10 Pa and 30°C ambient, calculated at nominal fluid flow. Calculate heat output using the following formula: $(T_{\text{fluid inlet}} - T_{\text{cooling air inlet}}) \times 1.2\text{kW}$ Example: $(80-30) \times 1.2 \text{ kW} = 60 \text{ kW}$.
Air exchange capacity:	8000 m ³ /h at -10 Pa.
Fluid supply requirement:	Nominal: 50 l/min per unit, 80°C at inlet Long Life Antifreeze suitable for aluminium must be added (25-60% concentration depending on climate conditions – consult installer).
Fluid temperature drop:	Approximately 20°C at nominal flow and 30°C ambient air.
Fan motor:	3×400VAC 6-pole (950 RPM) 0.3kW IP55 Insulation Class F.